

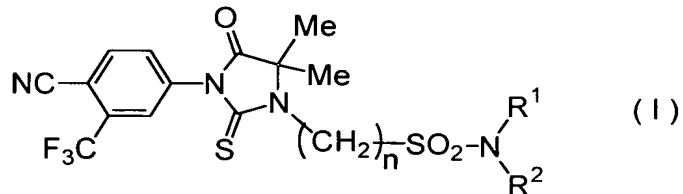
Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (original) A compound represented by formula (I):

[Formula 1]



wherein n is an integer selected from 1 to 20, and R<sup>1</sup> and R<sup>2</sup>, which may be the same or different, each represent a hydrogen atom or a linear or branched C<sub>1</sub>-C<sub>6</sub> alkyl group, or a salt, a prodrug or a solvate thereof.

2. (original) A compound according to claim 1 or a salt, a prodrug or a solvate thereof, wherein n is an integer selected from 1 to 10.

3. (currently amended) A compound according to claim 1 or a salt, a prodrug or a solvate thereof, wherein R<sup>1</sup> and R<sup>2</sup> are each a hydrogen atom.

4. (currently amended) A compound according to ~~any one~~  
~~of claims~~ claim 1 to 3 or a salt, a prodrug or a solvate  
thereof, wherein at least one of R<sup>1</sup> and R<sup>2</sup> is a methyl group.

5. (currently amended) A compound according to ~~any one~~  
~~of claims~~ claim 1 to 4, which is selected from the group  
consisting of:

4-[3'-(3"-aminosulfonylpropyl)-4',4'-dimethyl-5'-oxo-2'-thioxo-1'-imidazolidinyl]-2-trifluoromethylbenzonitrile;  
4-[3'-(4"-aminosulfonylbutyl)-4',4'-dimethyl-5'-oxo-2'-thioxo-1'-imidazolidinyl]-2-trifluoromethylbenzonitrile;  
4-[3'-(6"-aminosulfonylhexyl)-4',4'-dimethyl-5'-oxo-2'-thioxo-1'-imidazolidinyl]-2-trifluoromethylbenzonitrile;  
4-[3'-(7"-aminosulfonylheptyl)-4',4'-dimethyl-5'-oxo-2'-thioxo-1'-imidazolidinyl]-2-trifluoromethylbenzonitrile;  
4-[3'-(8"-aminosulfonyloctyl)-4',4'-dimethyl-5'-oxo-2'-thioxo-1'-imidazolidinyl]-2-trifluoromethylbenzonitrile;  
4-[3'-(9"-aminosulfonylnonyl)-4',4'-dimethyl-5'-oxo-2'-thioxo-1'-imidazolidinyl]-2-trifluoromethylbenzonitrile;  
4-[3'-(5"-aminosulfonylpentyl)-4',4'-dimethyl-5'-oxo-2'-thioxo-1'-imidazolidinyl]-2-trifluoromethylbenzonitrile;  
4-[3'-(4"-N,N-dimethylaminosulfonylbutyl)-4',4'-dimethyl-5'-oxo-2'-thioxo-1'-imidazolidinyl]-2-trifluoromethylbenzonitrile;

4-[3'-(3''-N,N-dimethylaminosulfonylpropyl)-4',4'-dimethyl-5'-oxo-2'-thioxo-1'-imidazolidinyl]-2-trifluoromethylbenzonitrile;

4-[3'-(5''-N,N-dimethylaminosulfonylpentyl)-4',4'-dimethyl-5'-oxo-2'-thioxo-1'-imidazolidinyl]-2-trifluoromethylbenzonitrile;

4-[3'-(6''-N,N-dimethylaminosulfonylhexyl)-4',4'-dimethyl-5'-oxo-2'-thioxo-1'-imidazolidinyl]-2-trifluoromethylbenzonitrile;

4-[3'-(7''-N,N-dimethylaminosulfonylheptyl)-4',4'-dimethyl-5'-oxo-2'-thioxo-1'-imidazolidinyl]-2-trifluoromethylbenzonitrile;

4-[3'-(8''-N,N-dimethylaminosulfonyloctyl)-4',4'-dimethyl-5'-oxo-2'-thioxo-1'-imidazolidinyl]-2-trifluoromethylbenzonitrile;

4-[3'-(9''-N,N-dimethylaminosulfonylnonyl)-4',4'-dimethyl-5'-oxo-2'-thioxo-1'-imidazolidinyl]-2-trifluoromethylbenzonitrile;

4-[3'-(3''-N-methylaminosulfonylpropyl)-4',4'-dimethyl-5'-oxo-2'-thioxo-1'-imidazolidinyl]-2-trifluoromethylbenzonitrile;

4-[3'-(4''-N-methylaminosulfonylbutyl)-4',4'-dimethyl-5'-oxo-2'-thioxo-1'-imidazolidinyl]-2-trifluoromethylbenzonitrile;

4-[3'-(5"-N-methylaminosulfonylpentyl)-4',4'-dimethyl-  
5'-oxo-2'-thioxo-1'-imidazolidinyl]-2-  
trifluoromethylbenzonitrile; and

4-[3'-(2"-aminosulfonyethyl)-4',4'-dimethyl-5'-oxo-2'-  
thioxo-1'-imidazolidinyl]-2-trifluoromethylbenzonitrile  
or a salt, a prodrug or a solvate thereof.

6. (currently amended) A drug which comprises the  
compound according to ~~any one of claims~~ claim 1 to 5 or a  
salt, a prodrug or a solvate thereof as an active ingredient.

7. (currently amended) A pharmaceutical composition  
which comprises the compound according to ~~any one of claims~~  
claim 1 to 5 or a salt, a prodrug or a solvate thereof as an  
active ingredient.

8. (currently amended) An anti-androgen agent which  
comprises the compound according to ~~any one of claims~~ claim 1  
~~to 5~~ or a salt, a prodrug or a solvate thereof as an active  
ingredient.

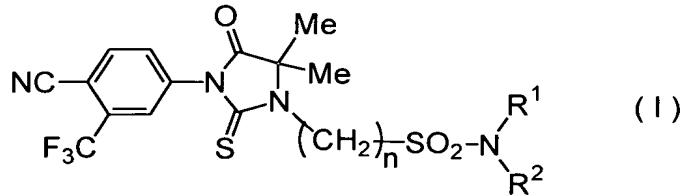
9. (currently amended) A prophylactic or therapeutic  
agent for a disease selected from prostate cancer, benign  
prostatic hypertrophy, male pattern baldness, sexual

precociousness, common acne, seborrhea and hypertrichosis, which comprises the compound according to ~~any one of claims~~ ~~claim 1 to 5~~ or a salt, a prodrug or a solvate thereof as an active ingredient.

10. (currently amended) The use of the compound according to ~~any one of claims~~ ~~claim 1 to 5~~ or a salt, a prodrug or a solvate thereof in manufacturing a medicament used as an androgen receptor antagonist.

11. (currently amended) A process for preparing a compound represented by formula (I):

[Formula 2]

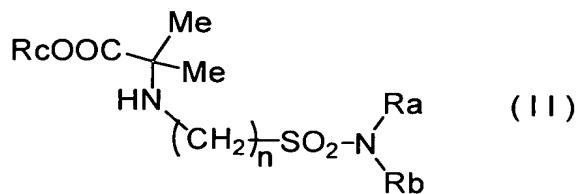


wherein n, R<sup>1</sup> and R<sup>2</sup> are as defined in ~~claim 1~~ n is an integer selected from 1 to 20, and R<sup>1</sup> and R<sup>2</sup>, which may be the same or different, each represent a hydrogen atom or a linear or branched C<sub>1</sub>-C<sub>6</sub> alkyl group,

which comprises the steps of:

reacting a compound represented by formula (II):

[Formula 3]



wherein

n is an integer selected from 1 to 20;

Ra and Rb, which may be the same or different, are each selected from the group consisting of a linear or branched C<sub>1</sub>-C<sub>6</sub> alkyl group substituted with one or more W<sup>1</sup>, a linear or branched C<sub>1</sub>-C<sub>6</sub> alkylcarbonyl group which may be substituted with one or more W<sup>1</sup>, an arylcarbonyl group which may be substituted with one or more W<sup>2</sup>, a linear or branched C<sub>1</sub>-C<sub>6</sub> alkoxy carbonyl group which may be substituted with one or more W<sup>1</sup>, an aryloxy carbonyl group which may be substituted with one or more W<sup>2</sup>, a linear or branched C<sub>1</sub>-C<sub>6</sub> alkylaminocarbonyl group which may be substituted with one or more W<sup>1</sup>, a linear or branched C<sub>1</sub>-C<sub>6</sub> dialkylaminocarbonyl group which may be substituted with one or more W<sup>1</sup>, a linear or branched C<sub>1</sub>-C<sub>6</sub> alkylsulfonyl group which may be substituted with one or more W<sup>1</sup>, an arylsulfonyl group which may be substituted with one or more W<sup>2</sup>, and R<sup>1</sup> and R<sup>2</sup>; or

Ra and Rb may be joined together to form a group =CH-W<sup>3</sup>;

W<sup>1</sup> is a linear or branched C<sub>1</sub>-C<sub>6</sub> alkoxy group, a linear or branched C<sub>1</sub>-C<sub>6</sub> alkylthio group, a linear or branched C<sub>1</sub>-C<sub>6</sub> alkylsulfinyl group, a linear or branched C<sub>1</sub>-C<sub>6</sub> alkylsulfonyl

group, an aryl group which may be substituted with one or more  $W^2$ , an aryloxy group which may be substituted with one or more  $W^2$ , or a  $C_1-C_3$  aralkyloxy group which may be substituted with one or more  $W^2$ ;

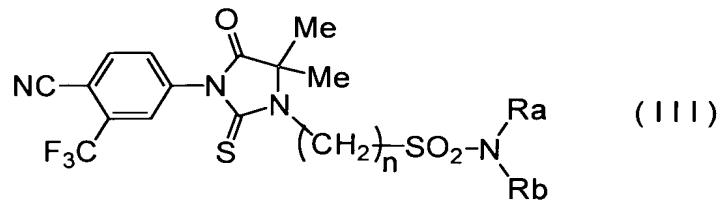
$W^2$  is a linear or branched  $C_1-C_6$  alkyl group, a linear or branched  $C_1-C_6$  alkoxy group, a linear or branched  $C_1-C_6$  haloalkyl group, a halogen atom, a cyano group, or a nitro group;

$W^3$  is a linear or branched  $C_1-C_6$  alkyl group, a linear or branched  $C_1-C_6$  alkoxy group, a linear or branched  $C_1-C_6$  alkylamino group, or a linear or branched  $C_1-C_6$  dialkylamino group;

$R^1$  and  $R^2$  are as defined in claim 1; and

$R_c$  is a linear or branched  $C_1-C_6$  alkyl group with 4-cyano-3-trifluoromethylphenyl isothiocyanate to obtain a compound represented by formula (III):

[Formula 4]



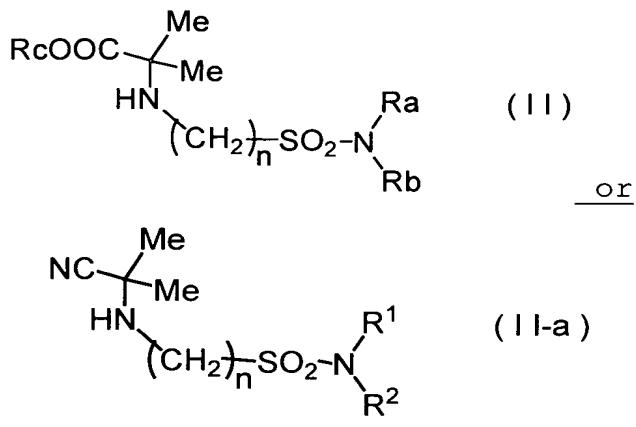
wherein  $n$ ,  $R_a$  and  $R_b$  are as defined above; and

a deprotection in cases where at least one of the groups  $R_a$  and  $R_b$  is other than  $R^1$  and  $R^2$ .

12. (currently amended) A compound represented by

formula (II) or (II-a):

[Formula 5]



wherein  $n$ ,  $\text{Ra}$ ,  $\text{Rb}$  and  $\text{Rc}$  are as defined in claim 11, n is an integer selected from 1 to 20;

Ra and Rb, which may be the same or different, are each selected from the group consisting of a linear or branched  $\text{C}_1\text{-C}_6$  alkyl group substituted with one or more  $\text{W}^1$ , a linear or branched  $\text{C}_1\text{-C}_6$  alkylcarbonyl group which may be substituted with one or more  $\text{W}^1$ , an arylcarbonyl group which may be substituted with one or more  $\text{W}^2$ , a linear or branched  $\text{C}_1\text{-C}_6$  alkoxy carbonyl group which may be substituted with one or more  $\text{W}^1$ , an aryloxy carbonyl group which may be substituted with one or more  $\text{W}^2$ , a linear or branched  $\text{C}_1\text{-C}_6$  alkylaminocarbonyl group

which may be substituted with one or more  $W^1$ , a linear or branched  $C_1-C_6$  dialkylaminocarbonyl group which may be substituted with one or more  $W^1$ , a linear or branched  $C_1-C_6$  alkylsulfonyl group which may be substituted with one or more  $W^1$ , an arylsulfonyl group which may be substituted with one or more  $W^2$ , and  $R^1$  and  $R^2$ ; or

$R_a$  and  $R_b$  may be joined together to form a group  $=CH-W^3$ ;  $W^1$  is a linear or branched  $C_1-C_6$  alkoxy group, a linear or branched  $C_1-C_6$  alkylthio group, a linear or branched  $C_1-C_6$  alkylsulfinyl group, a linear or branched  $C_1-C_6$  alkylsulfonyl group, an aryl group which may be substituted with one or more  $W^2$ , an aryloxy group which may be substituted with one or more  $W^2$ , or a  $C_1-C_3$  aralkyloxy group which may be substituted with one or more  $W^2$ ;

$W^2$  is a linear or branched  $C_1-C_6$  alkyl group, a linear or branched  $C_1-C_6$  alkoxy group, a linear or branched  $C_1-C_6$  haloalkyl group, a halogen atom, a cyano group, or a nitro group;

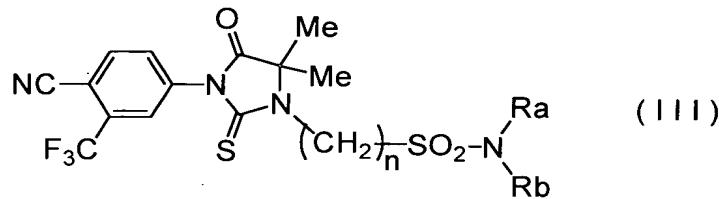
$W^3$  is a linear or branched  $C_1-C_6$  alkyl group, a linear or branched  $C_1-C_6$  alkoxy group, a linear or branched  $C_1-C_6$  alkylamino group, or a linear or branched  $C_1-C_6$  dialkylamino group;

$R_c$  is a linear or branched  $C_1-C_6$  alkyl group; and

R<sup>1</sup> and R<sup>2</sup>, which may be the same or different, each  
represent a hydrogen atom or a linear or branched C<sub>1</sub>-C<sub>6</sub> alkyl  
group.

13. (original) A compound represented by formula  
(III):

[Formula 6]



wherein n, Ra and Rb are as defined in claim 11 n is an  
integer selected from 1 to 20;

Ra and Rb, which may be the same or different, are each  
selected from the group consisting of a linear or branched C<sub>1</sub>-  
C<sub>6</sub> alkyl group substituted with one or more W<sup>1</sup>, a linear or  
branched C<sub>1</sub>-C<sub>6</sub> alkylcarbonyl group which may be substituted  
with one or more W<sup>1</sup>, an arylcarbonyl group which may be  
substituted with one or more W<sup>2</sup>, a linear or branched C<sub>1</sub>-C<sub>6</sub>  
alkoxycarbonyl group which may be substituted with one or more  
W<sup>1</sup>, an aryloxycarbonyl group which may be substituted with one  
or more W<sup>2</sup>, a linear or branched C<sub>1</sub>-C<sub>6</sub> alkylaminocarbonyl group  
which may be substituted with one or more W<sup>1</sup>, a linear or  
branched C<sub>1</sub>-C<sub>6</sub> dialkylaminocarbonyl group which may be

substituted with one or more  $W^1$ , a linear or branched  $C_1$ - $C_6$  alkylsulfonyl group which may be substituted with one or more  $W^1$ , an arylsulfonyl group which may be substituted with one or more  $W^2$ , and  $R^1$  and  $R^2$ ; or

$R_a$  and  $R_b$  may be joined together to form a group  $=CH-W^3$ ;  
 $W^1$  is a linear or branched  $C_1$ - $C_6$  alkoxy group, a linear or branched  $C_1$ - $C_6$  alkylthio group, a linear or branched  $C_1$ - $C_6$  alkylsulfinyl group, a linear or branched  $C_1$ - $C_6$  alkylsulfonyl group, an aryl group which may be substituted with one or more  $W^2$ , an aryloxy group which may be substituted with one or more  $W^2$ , or a  $C_1$ - $C_3$  aralkyloxy group which may be substituted with one or more  $W^2$ ;

$W^2$  is a linear or branched  $C_1$ - $C_6$  alkyl group, a linear or branched  $C_1$ - $C_6$  alkoxy group, a linear or branched  $C_1$ - $C_6$  haloalkyl group, a halogen atom, a cyano group, or a nitro group; and

$W^3$  is a linear or branched  $C_1$ - $C_6$  alkyl group, a linear or branched  $C_1$ - $C_6$  alkoxy group, a linear or branched  $C_1$ - $C_6$  alkylamino group, or a linear or branched  $C_1$ - $C_6$  dialkylamino group.